

## Dr. Pradyumna Kumar Choudhury

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### Academic Profile:

### Educational Qualification:

Ph.D. (Energy)	2017	Tezpur University, Tezpur, India	
M.Tech. (Energy Technology)	2009	Tezpur University, Tezpur, India	1 <sup>st</sup> Class, CGPA 8.23 (77.3 %)
B.E. (Electrical Engineering)	1992	Assam Engineering College, Gauhati University, Guwahati, India	1 <sup>st</sup> Class (Honours), 8 <sup>th</sup> Rank, 72.47 %

### Others (Training/ Short term courses):

- Training on Entrepreneurship Development and Management at Entrepreneurship Development Institute of India (EDII), Ahmedabad, India
- Training On Solar Photovoltaics System Design And Engineering At I.I.T., Madras, Conducted By Siemens Solar, U.S.A.
- Training On Energy Audit Conducted By National Productivity Council, Calcutta, India
- Training On Biomass Gasification Technology Conducted By CGPL, IISc., Bangalore
- Diploma In Computer Proficiency (D.C.P) In Dos/Windows Environment, C & Pascal Programming, Data Base Management Systems & Electronic Spreadsheet.

### Academic Distinction/Award:

- College Honours in Assam Engineering College
- First Class Eight Rank in the Gauhati University in B.E. (Electrical) Examination
- National Merit Scholarship since H.S.L.C. till completion of Graduation

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### Previous Work Experience:

- 11/1992 - 02/1994 : Trainee Engineer, Assam Carbon Products Limited, Guwahati, Assam
- 02/1994 - 02/1995 : Graduate Engineer Trainee, Assam State Electricity Board, Guwahati, Assam
- 05/1995 - 04/2000 : Project Associate (Energy Division), Assam Science, Technology and Environment Council, Guwahati, Assam
- 05/2000 - 07/2011 : Technical Officer (Energy), Tezpur University, Assam
- 07/2011 - till date : Assistant Professor (Energy), Tezpur University, Assam

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## Research Interests:

Solar Energy, Hybrid Energy System, Energy Conservation and management, Instrumentation & Control

## Publications:

- Dhritika Saikia and **Pradyumna Kumar Choudhury**, A case study on micro grid with flywheel energy storage system using Homer software, *Journal of Energy Research and Environmental Technology (JERET)*, 6 (30) 198-202, 2019, Publisher: Krishi Sanskriti Publications, New Delhi, India, p-ISSN: 2394-1561.
- **Pradyumna Kumar Choudhury** and Debendra Chandra Baruah, Experimental investigation of a tool for assessing solar air heater (SAH) performance, *Alternative Energy and Distributed Generation*,1(2)45-59, 2019, Publisher: Association of Energy Engineers (AEE), Atlanta, ISSN: 2643-6973 (print), 2643-6981 (online).
- **Pradyumna Kumar Choudhury** and Debendra Chandra Baruah, Solar air heater for residential space heating, *Energy, Ecology and Environment*, 2 (6) 387-403, 2017, Publisher: Springer, ISSN: 2363-7692 (print version), ISSN: 2363-8338 (electronic version).
- Kangkana Hazarika and **Pradyumna Kumar Choudhury**, Automatic monitoring of solar photovoltaic (SPV) module, *Materials Today: Proceeding*, 4 (14) 12606-12609, 2017, Publisher: Elsevier, ISSN: 2214-7853.
- Washima Tasnin and **Pradyumna Kumar Choudhury**, Design and development of an automatic solar water heater controller, *2015 International Conference on Energy, Power and Environment: Towards Sustainable Growth (ICEPE)*, 12-13 June 2015, NIT Shillong, Meghalaya, 2015, pp. 1-6, Publisher: IEEE; DOI: 10.1109/EPETSG.2015.7510073; Electronic ISBN: 978-1-4673-6503-1; Print on Demand (PoD) ISBN: 978-1-4673-6504-8.
- **P. K. Choudhury** and D. C. Baruah, Development of an empirical model for assessment of solar air heater performance, *Distributed Generation and Alternative Energy*, 29 (3) 56 - 75, 2014, Publisher: Taylor & Francis. Print ISSN: 2156-3306 Online ISSN: 2156-6550.
- Bibha Boro, Sanjay Basumatary, **Pradyumna K. Choudhury** and Biswajit Gogoi, Feedstocks, production, properties and blending effect of biodiesel: a review, *International Journal of Recent Development in Engineering and Technology*,3 (1), 6 -1 0, 2014, ISSN: 2347-6435 (Online).
- P. Saikia, R. Katak, **P. K. Choudhury** and D. Konwer, Carbonization of Eight Bamboo Species of Northeast India. *Energy Sources, Part A*, 29: 799 – 805, 2007. Publisher: Taylor & Francis. Print ISSN: 1556-7036 Online ISSN: 1556-7230.
- **P.K. Choudhury**, R.C. Nath, K.K. Sasi, and T.B. Isha, Energy Conservation in Ventilation Fans. In: Pandel, U., Poonia, M.P. (eds.) *Energy Technologies for Sustainable Development*, Prime Publishing House, Ghaziabad, U.P., India, pp. 94-96, 2003.

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## **Conference Paper:**

- Dhritika Saikia and **Pradyumna Kumar Choudhury**, A case study on micro grid with flywheel energy storage system using Homer Software; *International Conference on Recent Trend and Practices in Science, Technology, Management and Humanities for Sustainable Rural Development (STMH - 2019)*, 6th -7th September, 2019, University of Science and Technology Meghalaya, Meghalaya.
- K. Hazarika and **P. K. Choudhury**, Automatic cooling and performance monitoring of Solar Photovoltaic Modules. *International conference on Energy Options for Tomorrow: Technology to Sustainability (ICEOT 2017)*, 17- 19 April,, 2017, The Neotia University, Kolkata
- **P. K. Choudhury**, B. R. Tamuli, T. Gogoi, G. Baruah and D. C. Baruah, Development of multi-point temperature measurement system for low temperature application. *International conference on Energy Options for Tomorrow: Technology to Sustainability (ICEOT 2017)*, 17- 19 April, 2017, The Neotia University, Kolkata
- T. Gogoi and **P. K. Choudhury**. Role of Nanomaterials in super capacitor application. *International conference on Energy Options for Tomorrow: Technology to Sustainability (ICEOT 2017)*, 17- 19 April, 2017, The Neotia University, Kolkata
- Bhaskar Ranjan Tamuli and **Pradyumna Kumar Choudhury**, Comparative Performance Assessment of a Solar Hybrid Dryer with Traditional Drying Techniques. *International Conference on Advances in Energy Research (ICAER 2017)*, 12-14, December, 2017, IIT, Bombay. ( approved and submitted to Springer for publication by IIT Bombay)
- Hazarika, K. and **Choudhury, P. K.**, Automatic monitoring of solar photovoltaic (SPV) module, *International Conference on Solar Energy Photovoltaics (ICSEP 2016)*, KIIT, Bhubaneswar
- Tasnin, W. and **Choudhury P. K.**, Design and development of an automatic solar water heater controller, *2015 International Conference on Energy, Power and Environment: Towards Sustainable Growth (ICEPE)*, 12-13 June 2015, NIT Shillong, Meghalaya, 2015
- Bibha Boro, Sanjay Basumatary, **Pradyumna Kumar Choudhury**, Feedstocks, Production, Properties and Blending Effectof Biodiesel: A Review, *National Conference on Recent Advances in Science and Technology for Sustainable Developmet of Rural Areas in Chhattisgarh* organized by Parthivi Rashtriya Abhyantriki Sangosthi (PARAS), 7 – 8 March, 2014, Parthivi College of Engineering and Management
- Washima Tasnin, **Pradyumna Kumar Choudhury**, Design of Temperature Control Mechanism for Solar Water Heating System, *International Conference on Green Energy Smart materials Through Science Technology and Management (GESM)* organized by Gauhati University, University of South Africa, Synergy for Energy Challenges and Opportunities for North East (SECONE), 21-23 January 2014 Gauhati University, (ISBN:978-81-921779-0-8).

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- Bibha Boro, Sanjay Basumatary, **Pradyumna Kumar Choudhury**, Non-conventional Feedstocks, Production, Properties and Blending Effect of Biodiesel: A Review, *International Conference on Green Energy Smart materials Through Science Technology and Management (GESM)* organized by Gauhati University, University of South Africa, Synergy for Energy Challenges and Opportunities for North East (SECONE), 21-23 January 2014 Gauhati University, (ISBN:978-81-921779-0-8).
  - B. K. Sahoo, **P. K. Choudhury**, Designing and Testing of the battery performance of PIC microcontroller based solar wind hybrid system, *International Congress on Renewable Energy (ICORE) – 2011*, 2- 4 November, 2011, Tezpur University

#### **Awards:**

- **Best Poster Award: Choudhury P. K.**, Tamuli B. R., Gogoi T., Baruah G. and Baruah D.C. Development of a multi-point temperature measurement system for low temperature application. In: *International Conference on Energy Options for Tomorrow: Technology to Sustainability (ICEOT 2017)*, 17–19 April 2017, Kolkata, India.

#### **Research project:**

- **Completed** : 1, Funding Agency: ASTEC (Rs. 1.25 Lacs), 2014-17.
- **Ongoing**: 1 (collaborative), Funding Agency: ASTU Under IMPRINT (Rs. 3.00 Lacs), 2019-20.

**Patent** : 1 (India), Patent No: 325837, Patent Application NO. 20/KOL/2011; Title: Digital occupancy meter for commercial passenger vehicle.

#### **Membership of Professional Bodies:**

- Institute of Electrical and Electronics Engineers (IEEE),
- Institution of Engineers (India) (IEI),
- Solar Energy Society of India (SESI)

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